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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,106	07/19/2006	Volker Brinkmann	33513-US-PCT	1204

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NOVARTIS
CORPORATE INTELLECTUAL PROPERTY
ONE HEALTH PLAZA 104/3
EAST HANOVER, NJ 07936-1080

EXAMINER	
KIM, JENNIFER M	
ART UNIT	PAPER NUMBER
1628	
MAIL DATE	DELIVERY MODE
03/25/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/583,106	BRINKMANN ET AL.	
	Examiner	Art Unit	
	JENNIFER M. KIM	1628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *4-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *4-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :6/15/2006; 8/18/2006; 8/18/2006; 11/4/2009.

DETAILED ACTION

Claims 4-14 are presented for Examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 4-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Lynch et al. (US 2007/0088002A1) evidenced by Tokuda et al (2000).

Lynch et al. teaches composition comprising phosphate esters of sphingosine-1-phosphate analog as agonist of spingosine-1-phosphate receptor activity to treat variety of human disorders including Alzheimer's disease and dementia (abstract, [0410] and [0473]). Lynch et al. teach that the composition can be combined with prednisolone.

Tokuda et al teach that prednisolone is an anti-inflammatory agent useful for the treatment of Alzheimer's and dementia (abstract).

Claims 4 and 9-11 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Quesniaux et al. (2001) evidenced by Watanabe (2003).

Quesniaux et al teach that FTY-720 (Applicants' agent, 2-amino-2-[2-(4-octylphenyl)ethyl]propane-1,3-diol) in combination with cyclosporine showed strong synergy in immunosuppression. (abstract, see Table 1).

Watanabe teaches that cyclosporin is a useful agent for the treatment of neurodegenerative disorders such as Parkinson's disease, Alzheimer's disease and Huntington's disease.

Applicants' recitation of the intended use of treating progressive dementia or brain degeneration, b-amyloid-related inflammatory disease or disorders or for reducing or inhibiting loss of cognitive abilities must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lynch et al. (US 2007/0088002A1) in view of Tokuda et al (2000).

Lynch et al. as applied as before.

Lynch et al. does not teach the actual administration of the combination comprising a spingosine-1-phosphate (S1P) receptor agonist and prednisolone for the treatment of Alzheimer's disease.

Tokuda et al. teach that prednisolone is useful for the treatment of Alzheimer's disease and dementia.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to administer the combination of S1P receptor agonist and prednisolone for the treatment of Alzheimer's disease because each of the active ingredients are known to treat Alzheimer's disease in view of the cited references. One of ordinary skill in the art would have combined the prednisolone with S1P receptor agonist by known methods and that in combination, each element merely would have performed the same Alzheimer's disease treating activity as it did separately. The convenience of putting the compounds having the same Alzheimer's disease treating activity of S1P receptor agonist and prednisolone together in one dosage form, though perhaps a matter of great convenience does not produce a "new" or "different" function and to those skilled in the art, the use of the old elements in combination would have been obvious. The motivation for combining the components flows from their individually known common utility (see In re Kerkhoven, 205 USPQ 1069(CCPPA 1980)) and more importantly, Lynch et al. teaches that prednisolone can be combined with S1P agonist in the treatment of Alzheimer's disease.

Claims 7, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynch et al. (US 2007/0088002A1) in view of Xie et al. (Publication date March 2003).

Lynch et al. teaches composition comprising phosphate esters of sphingosine-1-phosphate analog as agonist of spingosine-1-phosphate receptor activity to treat variety

of human disorders including Alzheimer's disease and dementia (abstract, [0410] and [0473]). Lynch et al. teach that the composition can be combined with prednisolone.

Lynch et al do not expressly teach the specific S1P agonist such as FTY-720 (Applicants' agent, 2-amino-2-[2-(4-octylphenyl)ethyl]propane-1,3-diol) for the treatment of Alzheimer's disease.

Xie et al. teach that FTY720 is a full agonist for S1P receptors.

It would have been obvious to one of ordinary skill in the art to substitute FTY720 with Lynch et al's S1P agonist because Lynch et al. teach that S1P agonist in general are effective for the treatment of Alzheimer's disease and because FTY-720 (Applicants' agent, 2-amino-2-[2-(4-octylphenyl)ethyl]propane-1,3-diol) is a full S1P agonist as taught by Xie et al. One would have been motivated to make such a modification in order to achieve the beneficial effect of FTY-720 having a fully S1P agonistic activity in the treatment of Alzheimer's disease. There is a reasonable expectation of successfully treating Alzheimer's disease with FTY 720 because it has the full agonistic activity of S1P receptor that is necessary for the treatment of Alzheimer's disease.

For these reasons the claimed subject matter is deemed to fail to patentably distinguish over the state of the art as represented by the cited references. The claims are therefore properly rejected under 35 U.S.C. 103.

None of the claims are allowed.

Communications

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER M. KIM whose telephone number is (571)272-0628. The examiner can normally be reached on Monday through Friday 6:30 am to 3 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JENNIFER M KIM/
Primary Examiner, Art Unit 1628

Jmk
March 22, 2010